ABSTRACT OF THE DISCLOSURE

An entropy decoder receives a code sequence which is obtained by breaking up coefficients that have undergone discrete wavelet transformation into bit planes, and encoding the bit planes, and entropy-decodes the code sequence. A correction value computing unit determines correction values used to correct dequantized values in a dequantizer in accordance with the number of quantization indices decoded by the entropy decoder. The dequantizer receives the quantization indices decoded by the entropy decoder, and generates a series of coefficient sequences that represent an image by correcting and dequantizing the quantization indices on the basis of the values of the quantization indices and the correction values obtained by the correction value computing unit. A predetermined inverse discrete wavelet transformer restores an image by computing the inverse transforms of the coefficient sequences obtained by the dequantizer, and outputs the restored image to an image output unit.